

## **AMENDMENTS TO THE CLAIMS**

**Claim 1 (Original)** Conduit (1) for conveying and heating a flow of gas, comprising in its interior at least an electric heating element, characterized in that said at least a heating element:

- is formed by a thick-film layer (2),
- works as a positive temperature coefficient (PTC) element,
- is arranged within said conduit (1), and
- delimits said flow of gas at least on one side.

**Claim 2 (Original)** Conduit according to claim 1, characterized in that said thick-film heating element (2) is substantially arranged close to and along at least a portion of inner wall (5) of said conduit.

**Claim 3 (Currently Amended)** Conduit according to claim 1 ~~or 2~~, characterized in that between said thick-film PTC heating element (2) and the corresponding inner-wall portion (5) there is interposed a layer of insulating material (4).

**Claim 4 (Original)** Conduit according to the preamble of claim 1, characterized in that said heating element:

- is formed by a thick-film layer (2),
- works as a positive temperature coefficient (PTC) element,
- forms an integral part (7) of a portion of wall of said conduit, in such a manner that it is substantially oriented in a parallel manner to the flow direction of said gas, so that the latter is not even partially obstructed by such a thick-film layer.

**Claim 5 (Currently Amended)** Conduit according to ~~any of the preceding claims~~ claim 1, characterized in that:

- said thick-film PTC heating element is subdivided into a plurality of individual and distinct heating elements (R1, R2, R3) featuring at least partly a PTC working mode,
- each one of said distinct heating elements is energized independently (parallel-connected heating elements),
- each one of said distinct heating elements is connected individually in series with a

respective switch means (N1, N2, N3),

- the operation of said switch means is driven by command signals issued by a driving and control unit (M),

- said driving and control unit processes and outputs said command signals as a pre-established function of signals received from a control means (M2) provided to control the general operation of the apparatus in which said conduit is included.

**Claim 6 (Currently Amended)** Conduit according to ~~any of the preceding claims 1 to 4~~ claim 1, characterized in that:

- said thick-film PTC heating element is subdivided into a plurality of individual and distinct heating elements (R1, R2, R3),

- each one of said distinct heating elements is energized independently (parallel-connected heating elements),

- each one of said distinct heating elements is connected individually in series with a respective switch means (N 1, N2, N3),

- the operation of said switch means is driven by command signals issued by a driving and control unit (M),

- said driving and control unit processes and outputs said command signals as a function of an external temperature detected by a respective appropriate sensor (S).

**Claim 7 (Original)** Conduit according to claim 6, characterized in that said temperature sensor (S) is adapted to measure the temperature of the gas flowing through said conduit (1), or the temperature of the surfaces of said conduit, at a pre-established position.

**Claim 8 (Currently Amended)** Clothes drying machine comprising a conduit (1) for circulating a flow of forced and heated-up air and for blowing said flow of air into the drum holding the clothes to be dried, characterized in that said conduit is provided and made according to ~~any of the preceding claims or combination thereof~~ claim 1.

**Claim 9 (New)** Conduit according to claim 2, characterized in that between said thick-film PTC heating element (2) and the corresponding inner-wall portion (5) there is interposed a layer of insulating material (4).

**Claim 10 (New)** Conduit according to claim 2, characterized in that:

- said thick-film PTC heating element is subdivided into a plurality of individual and distinct heating elements (R1, R2, R3) featuring at least partly a PTC working mode,
- each one of said distinct heating elements is energized independently (parallel-connected heating elements),
- each one of said distinct heating elements is connected individually in series with a respective switch means (N1, N2, N3),
- the operation of said switch means is driven by command signals issued by a driving and control unit (M),
- said driving and control unit processes and outputs said command signals as a pre-established function of signals received from a control means (M2) provided to control the general operation of the apparatus in which said conduit is included.

**Claim 11 (New)** Conduit according to claim 3, characterized in that:

- said thick-film PTC heating element is subdivided into a plurality of individual and distinct heating elements (R1, R2, R3) featuring at least partly a PTC working mode,
- each one of said distinct heating elements is energized independently (parallel-connected heating elements),
- each one of said distinct heating elements is connected individually in series with a respective switch means (N1, N2, N3),
- the operation of said switch means is driven by command signals issued by a driving and control unit (M),
- said driving and control unit processes and outputs said command signals as a pre-established function of signals received from a control means (M2) provided to control the general operation of the apparatus in which said conduit is included.

**Claim 12 (New)** Conduit according to claim 4, characterized in that:

- said thick-film PTC heating element is subdivided into a plurality of individual and distinct heating elements (R1, R2, R3) featuring at least partly a PTC working mode,
- each one of said distinct heating elements is energized independently (parallel-connected heating elements),
- each one of said distinct heating elements is connected individually in series with a respective switch means (N1, N2, N3),
- the operation of said switch means is driven by command signals issued by a driving and control unit (M),
- said driving and control unit processes and outputs said command signals as a pre-established function of signals received from a control means (M2) provided to control the general operation of the apparatus in which said conduit is included.

**Claim 13 (New)** Conduit according to claim 2, characterized in that:

- said thick-film PTC heating element is subdivided into a plurality of individual and distinct heating elements (R1, R2, R3),
- each one of said distinct heating elements is energized independently (parallel-connected heating elements),
- each one of said distinct heating elements is connected individually in series with a respective switch means (N 1, N2, N3),
- the operation of said switch means is driven by command signals issued by a driving and control unit (M),
- said driving and control unit processes and outputs said command signals as a function of an external temperature detected by a respective appropriate sensor (S).

**Claim 14 (New)** Conduit according to claim 3, characterized in that:

- said thick-film PTC heating element is subdivided into a plurality of individual and distinct heating elements (R1, R2, R3),
- each one of said distinct heating elements is energized independently (parallel-connected heating elements),
- each one of said distinct heating elements is connected individually in series with a respective switch means (N 1, N2, N3),

- the operation of said switch means is driven by command signals issued by a driving and control unit (M),
- said driving and control unit processes and outputs said command signals as a function of an external temperature detected by a respective appropriate sensor (S).

**Claim 15 (New)** Conduit according to claim 4, characterized in that:

- said thick-film PTC heating element is subdivided into a plurality of individual and distinct heating elements (R1, R2, R3),
- each one of said distinct heating elements is energized independently (parallel-connected heating elements),
- each one of said distinct heating elements is connected individually in series with a respective switch means (N 1, N2, N3),
- the operation of said switch means is driven by command signals issued by a driving and control unit (M),
- said driving and control unit processes and outputs said command signals as a function of an external temperature detected by a respective appropriate sensor (S).

**Claim 16 (New)** Conduit according to claim 13, characterized in that said temperature sensor (S) is adapted to measure the temperature of the gas flowing through said conduit (1), or the temperature of the surfaces of said conduit, at a pre-established position.

**Claim 17 (New)** Conduit according to claim 14, characterized in that said temperature sensor (S) is adapted to measure the temperature of the gas flowing through said conduit (1), or the temperature of the surfaces of said conduit, at a pre-established position.

**Claim 18 (New)** Conduit according to claim 15, characterized in that said temperature sensor (S) is adapted to measure the temperature of the gas flowing through said conduit (1), or the temperature of the surfaces of said conduit, at a pre-established position.

**Claim 19 (New)** Clothes drying machine comprising a conduit (1) for circulating a flow of forced and heated-up air and for blowing said flow of air into the drum holding the clothes to be

dried, characterized in that said conduit is provided and made according to claim 2.

**Claim 20 (New)** Clothes drying machine comprising a conduit (1) for circulating a flow of forced and heated-up air and for blowing said flow of air into the drum holding the clothes to be dried, characterized in that said conduit is provided and made according to claim 3.